

OLDEST BEE PAPER IN AMERICA

THE AMERICAN BEE JOURNAL

ESTABLISHED IN 1861

VOL. XIX.

CHICAGO, ILL., SEPTEMBER 12, 1883.

No. 37.

THE AMERICAN BEE JOURNAL

Published every Wednesday, by

THOMAS G. NEWMAN,
EDITOR AND PROPRIETOR.

The Editor of the BEE JOURNAL being unable to attend the National Convention, it will be represented by the Rev. W. F. Clarke, of Guelph, Ont., who is duly authorized to take subscriptions and orders for any of our publications.

Mr. James Heddon has been on a tour up into Northern Michigan, in order to recruit his health, and the *Dowagiac Times* contains a long letter from him concerning his trip, which is interesting and humorous.

We have received a catalogue of "Holland Bulbs and Plants for fall planting," from Hiram Sibley & Co., Rochester, N. Y., and Chicago, Ill. It is nicely gotten up and beautifully illustrated.

The firm name of Crocker & Blake, under which E. E. Blake and F. L. Ripley have transacted business for the past ten years at Boston, Mass., is changed to Blake & Ripley. This is the honey firm of Boston.

"The New Zealand and Australian Bee Journal" is the title of a new bee periodical published at Auckland, New Zealand. It is well edited by a progressive bee-master, and should receive a hearty support by the bee men of Oceania. It is edited and published by Mr. H. H. Hayr, Monthly, at 6s. a year, and contains 12 pages and a cover.

Articles for publication must be written on a separate piece of paper from items of business.

Reduced Fares to Toronto.

We have received from President D. A. Jones, the Programme of the Toronto Exhibition, and Mr. Jones writes us that he has had Thursday, Sept. 20, set apart as "American Visitor's Day," in honor of our American visitors.

We have had several inquiries about excursion rates from Chicago to Toronto, as mentioned by Mr. Jones in *Gleanings*, as follows:

Announce return tickets at single fares on all railroads in Canada from the 17th to the 22d of September; 1½ fares for excursion tickets from the 10th to the 22d of September. I am arranging hotel accommodations. Urge every one who possibly can get here, to come. There will be special excursions from many points in the United States very cheap, to the Falls and Toronto. I hear of one from Kentucky, Cincinnati, Pennsylvania, New York, Chicago, etc., but cannot get particulars yet.

We have made inquiries at the Grand Trunk Railway offices in Chicago, and they know nothing of it. We can get the regular Excursion Return Tickets from Chicago to Toronto for \$20, but none both ways for one fare, as Mr. Jones mentions.

Regular excursion tickets from Cincinnati to Niagara Falls, good until Oct. 28, can be bought for \$15. Excursion tickets from any part of the South or Southwest to the Louisville Southern Exposition can be had, or from Louisville to Cincinnati Exposition. In this way, if in no other, Toronto, which is only 30 miles from Niagara Falls, may be reached cheaply.

President D. A. Jones, under date of Beeton, Aug. 25, 1883, writes us as follows:

I have received a letter, of which the enclosure is a copy, from Mr. Hill, Manager of the Toronto Industrial Exhibition, which is the outcome of an application which I made to him to secure reduced rates for beekeepers in the State of Michigan. As it would receive publicity through

your JOURNAL, perhaps you will be kind enough to give it insertion. There are single fare rates for the whole week of our convention.

D. A. JONES.

BEETON, Aug. 25, 1883.

H. J. HILL, Esq.—Dear Sir: Replying to yours of the 15th inst., I would say that we do not wish to advertise any reduction from regular rates, but if there are any on our line who apply to you, and you will refer the application to me, I will furnish them with certificates on which they can obtain tickets to Port Huron or Detroit, and return at excursion rates. Yours truly, D. EDWARDS.

We have written to Mr. Jones to try to get an order on the Chicago Office of the Grand Trunk Railway to sell us as many tickets as are needed at the rate for one way for the round trip, and it will pay those who go to either write to us, or call at this office en route.

The new Postal Notes are now obtainable, and should be sent in letters for all small sums. Each of the 6,500 money-order offices have been supplied with books containing the Postal Notes. New York received 20 books, and the other offices from that number to one book. Each book contains 500 notes. In addition, each office has been furnished with a piler punch and blanks, to be used in the business. A uniform fee of 3 cents is charged for each note, payable at the office of issue. The office at which the note is made payable must be selected by the sender, and the note is payable at that office only. Each note is made payable to the bearer, and in this respect the note is of the nature of a legal tender. It is no more safe than it is to send postage stamps or bank bills in letters. Absolute safety can be had only when regular money orders are obtained.

There is now no excuse for sending postage stamps for small sums, except at offices too small to issue the Postal Notes or Money Orders. Be sure to get these Postal Notes drawn on the Madison St. Station, Chicago, Ill.

Hunting Bees in the Woods.

Mr. C. Norris, of Traverse City, Mich., writes as follows:

Being a reader of your valuable paper, the Weekly BEE JOURNAL, I am very anxious, and desire that some of your readers who have had successful experience in hunting wild honey bees, would give their experience in detail; what kind of feed to bait them on, and take the bees from their tree and bring them home successfully, and the best bait to use that bees will come to and carry off when the flowers are giving a flow of nectar, and oblige one wishing to learn to capture wild honey bees.

Mr. F. M. Johnson gives his experience in hunting bees as follows:

You require a small box, which can be made of any kind of wood. The box is of a slanting shape, and should be made according to the following dimensions: Bottom 4×6 inches; sides, 4 inches at one end beveled down to $1\frac{1}{2}$ inches at the other; end pieces, one, 4×4 inches, the other $1\frac{1}{2}$ deep by 4 inches long. The top should be a separate piece, and made as follows: Width, 4 inches, whole length 12 inches; cutting down 4 inches on end for handle, and inserting a glass 3×1 inches, flush with the under side at the other end, as near the end as convenient.

The box should contain a piece of honey comb about $1\frac{1}{4}$ inches in thickness, which should be scented with bee bait (the directions for making this are given below), covering the bottom of the box. Taking the box in the left hand, and the cover in the right, and approaching the bee while at work on the flower or shub, you insert the box under the bee, and quickly putting the cover on the top (in such a manner that the light can shine in), you have the bee secure in the box; then put the box on a stake 3 or 4 feet high, taking care not jar the box more than necessary. Then shove the cover down so as to shut out the light from the glass, when the bee will go to work on the honey, which can be ascertained by holding the ear to the box, as it will cease its "humming" as soon as it commences on the comb. Then the cover can be taken off and the bee will remain on the honey. Then take a position where you can have an unobstructed view of the box and its surroundings, and wait for the bee to come out, which it will do in from one to three minutes, and commence circling in the air, gradually enlarging the circles until it finds its latitude, at which it will immediately start in a direct line for its home, and here care must be taken to accurately mark the direction it goes. You must now wait for a short time, when the bee will return and re-enter the box, which it will repeat as long as the box remains. If the tree should be near by the other bees will accompany it on its second or third return; if at a great distance it will take a longer period for the bees to "double up."

If you have gotten 15 or 20 bees at work on the line you can safely take the box to a point as far distant, in the course the bee has taken, as you choose, being careful not to pass where the bee is likely to tree, as they will not follow the other way. Now, open the box again, and if you are on the line the bees will find it in a very few minutes. If they do not you will know that you are off the line, or have passed the tree, and should move your box to a point that you know is on the line. This is to be repeated until you run the bee to its tree.

If you have but a few bees it will be necessary to shut them in the box and move them in this manner from 30 to 60 rods at a time, then open your box and wait for them to go and return. This is to be repeated until you have found the tree.

Cross lining is important. If anything should prevent you from following the bee in a direct line from where you first start it, you can move the box a distance to the right or left and start it again, by which means you can center the bee on some prominent object, whereby you can invariably locate the tree within a radius of 5 or 6 rods.

Half an ounce of tincture of annis mixed with a half dozen drops of oil of organum, to be kept in an air-tight bottle.

Instead of using honey in your box, put a quantity of granulated sugar in a bottle and dissolve it with cold water until it becomes a thick syrup, and fill the comb in the box with this liquid, which is better than the real honey.

Ontario Convention.

The third annual general meeting of the Ontario Bee-Keepers' Association will meet in the City Hall, Toronto, on Tuesday, the 20th day of September next, during the second week of the Industrial Exhibition. As the North American Bee-Keepers' Convention meets at the same time and place, it has been arranged that the two bodies hold joint meetings in discussing matters pertaining to our common interests, as the leading beekeepers of America are to be present. This will, undoubtedly, be the most interesting meeting of apiarists ever assembled in Canada. The venerable Mr. Langstroth and all the prominent bee-men of the United States are expected to be present. A profitable time is anticipated, and a good turnout requested. The convention will last three days. A meeting for the purely business work of our association will be held sometime during the convention, of which due notice will be given.

R. MCKNIGHT,
Pres. Ontario Bee Association.

The Cass County Bee-Keepers' Association, organized on the 15th of August, will meet on the 10th of October, 1883, in Logansport, Ind. All persons interested in bees and honey are respectfully invited to come.

DE WITT BROWN, Sec.

The Curse of Adulteration.

The *Prairie Farmer* discusses the subject of food adulteration in the following strain, and indicates the remedy:

In Great Britain the laws are stringent and more rigidly enforced than elsewhere, but still it is admitted to be a great evil even in the "United Kingdom." In Germany the extent to which adulteration of food, and almost everything which enters into commerce is carried, is appalling. The most of the wines brought from Germany are villainous imitations of pure articles, loaded with drugs and unfit to be taken into the stomach. We do not know what we drink, nor hardly what we eat, nor can a physician predict with any certainty the effect of his prescriptions on account of their adulteration. Community at large is in a measure to blame in this matter; indifference on the part of the public enables those who engage in these nefarious operations to ply their vocations with impunity. The laws on the statute books against the adulteration of articles of food and drink are, therefore, almost a dead letter. Unless complaint is made, the public authorities take no notice of these things, and no private citizen cares to take it upon himself to make complaints of the manufacture or sale of such articles, and thus the disreputable business goes on in every direction. There is scarcely an article of food, except fresh vegetables and fruits, that is free from adulteration. Seemingly many persons engaged in these pursuits have deluded themselves into believing that such tampering with food has become legitimate, from the fact that the great public permits itself to be imposed upon with impunity. Nevertheless, the whole business is neither legitimate nor honest. It is a species of fraud that ought not to be tolerated. Articles are sold for what they are not, and very often they contain deleterious and poisonous substances that should never enter the human stomach.

We might fill our columns with analyses made by chemists in this country and Europe, of adulterated articles now sold as human food, embracing nearly everything in use for that purpose, but it is unnecessary. Suffice it that flour, butter, lard, sugar, coffee, tea, spices, canned fruits, and other leading articles of diet are especial objects of the adulterators' arts.

Who will point out the remedy for this gigantic evil? We would call the attention of the State Board of Health to it in Illinois. Perhaps there are cases of the use of poisonous ingredients in some of these fraudulent imitations or adulterations of food, which would bring those who are producing them within the purview of that body's authority, and lead to a few wholesome examples of condign punishment for infractions of the law in such cases made and provided.

Local Convention Directory.

1888.	Time and Place of Meeting.
Sept. 12.—	Eastern Indiana, at Richmond, Ind. M. G. Reynolds, Sec., Williamsburg, Ind.
Sept. 12-14.—	Tri-State, at Toledo, Ohio. Dr. A. B. Mason, Sec., Wagon Works, O.
Sept. 18-20.—	North American, at Toronto, Ont. A. I. Root, Sec., Medina, O.
Sept. 20.—	Ontario, at Toronto, Ont. R. McKnight, Pres.
Sept. 20-21.—	Western, at Independence, Mo.
Sept. 26.—	Tuscarawas Val., at Newcomerstown, O. Herbert Denman, Sec., Coshocton, O.
Oct. 6.—	Marshall Co., at Marshalltown, Iowa. J. W. Sanders, Sec., Le Grand, Iowa.
Oct. 9, 10.—	Northern Mich. at Sheridan, Mich. O. R. Goodno, Sec., Carson City, Mich.
Oct. 10.—	Cass County, at Loganport, Ind. De Witt Brown, Sec.
Oct. 17, 18.—	Northwestern, at Chicago, Ill. Thomas G. Newman, Sec.
Oct.—	Northern Ohio, at Norwalk, O. S. F. Newman, Sec.
Nov. 3.—	Mahoning Valley, at Newter Falls, O. L. Carson, Sec.
Dec. 5-6,	Michigan State, at Flint. H. D. Cutting, Sec., Clinton, Mich.

In order to have this table complete, Secretaries are requested to forward full particulars of time and place of future meetings.—ED.

Bee & Honey Show at Lexington, Ky.

Messrs. Williamson & Bro. made an excellent display at the Lexington Fair, and were highly complimented on every side. The following notices were in the Lexington papers:

Mr. Russell White, of Maysville, a prominent young bee-keeper, who attended our Fair Wednesday, said he never saw such a beautiful display of honey before, as the display made by Messrs. Williamson & Bro., of this city. Mr. White had just returned from the great Southern Exposition at Louisville, and saw several honey displays there, and all combined were nothing compared with the display he saw at our Fair.

The display of honey by the Messrs. Williamson, was the finest and most complete on exhibition, and shows the excellent taste of our enterprising townsmen, whose 7 colonies of bees in this city alone, gathered 1,800 pounds of this beautiful honey.

Mr. White said if the Messrs. Williamson had taken their display to Louisville, they would beyond doubt, carried off the premium, which was \$50; but they preferred to remain at home and carry off the blue ribbon.—*Evening News.*

The first display that struck our attention upon entering the Hall building was Williamson & Bro.'s display of honey of all descriptions in and out of comb, some dark-colored and rich, and some as clear as an octagonal diamond. Mr. Williamson was awarded the premium unanimously, and a beautiful silver medal hung from the top jars within the casing.—*Gazette.*

Williamson & Bro. made one of the largest collections and handsomest displays of honey ever seen at the Fair.—*Transcript.*

The National Convention.

The National Bee-Keepers' Association, will hold its Annual Convention in the City Hall and Council Chamber in the city of Toronto, on Tuesday, Wednesday and Thursday, the 18th, 19th and 20th days of September, during the second week of Canada's Great Fair. All the railroads in Canada will issue tickets during this week, good to return, up to Saturday night 22d, at single fare for the round trip. Special excursion rates will be arranged from various parts of the United States, of which due notice will be given. Those who intend being present may be kept posted on the latest excursion rates, etc., by addressing me, and also that I may arrange hotel accommodation. Private lodgings will, if possible, be secured for those who desire it, and every effort will be made to make everybody comfortable. A grand meeting is anticipated. D. A. JONES, President.

The quarterly meeting of the Marshall County Bee-Keepers' Association, will be held at the Court House, in Marshalltown, Iowa, on Saturday, Oct. 6, at 10.30 A. M. Subject for discussion, "Fall and Winter Care." All interested, in this and adjoining counties, are invited, for we hope to have a good meeting, and one of benefit to all.

J. W. SANDERS, Sec.
Le Grand, Iowa.

The next regular meeting of the Mahoning Valley Bee-Keepers' Association will be held at Newton Falls, O., on the first Saturday of November, 1888. L. CARSON, Pres.
E. W. TURNER, Sec.

The "Bad Boy" Abroad.—We have just received from the publishers a book with the above title, giving the humorous experiences of a Bad Boy in Europe. It will drive the "blues" miles away, and is warranted to create laughter in the hearts of those who never laughed before. It is handsomely illustrated and bound. Price, paper cover, 25 cents; bound in cloth, 60 cents, and it will be sent to any address, post-paid, upon receipt of the price, by J. S. Ogilvie & Co., publishers, 31 Rose street, New York.

A Watertown (N. Y.) man, who has kept an account of the weather, claims that it invariably repeats itself, and gives the following as the result of his observations, viz.: All years ending in 9, 0 or 1 are extremely dry; those ending in 2, 3, 4, 5 or 6 are extremely wet; those ending in 7 or 8 are ordinarily well balanced; those ending in 6 have extremely cold winters; those ending in 2 have an early spring; those ending in 1 have a late spring; those ending in 3 and 4 are subject to great floods.

The Rev. L. L. Langstroth has been invited to attend the Northwestern Bee-Keepers' Convention to be held at Chicago, Oct. 17 and 18, and accepts in the following language:

"About the invitation to attend the Convention at Chicago, and your very kind invitation to me to share your hospitalities, friend Newman, allow me to say, I accept both with great pleasure, and if nothing unforeseen should prevent, I will be glad to make the personal acquaintance of the Northwestern bee-keepers."

L. L. LANGSTROTH."

Honey and Beeswax Market.

OFFICE OF AMERICAN BEE JOURNAL,
Monday, 10 a. m., Sept. 10, 1883.

The following are the latest quotations for honey and beeswax received up to this hour:

CINCINNATI.

HONEY—The demand for extracted honey is exceedingly dull; for comb honey, only fair; arrivals are plentiful. Stocks are large in the hands of corn merchants and others. Our own supply is larger than ever, and, for the present, we cannot compete with commission merchants. We may have to offer lower figures. Our prices so far were 7½¢ for extracted, and 14¢@15¢ for comb honey on arrival.

BEESWAX—Arrivals of beeswax are good at 25¢@28¢, and the demand is fair.

CHAR. F. MUTH.

NEW YORK.

HONEY—White clover and basswood in 1 and 2 lb. sections, 18¢. Dark and second quality, 14¢; extracted white clover in kegs and barrels, 11¢; dark, 8¢.

BEESWAX—Prime yellow, 30¢@31¢.

H. K. & F. B. THURBER & Co.

CHICAGO.

HONEY—Comb honey has been bought with more freedom this week, and prices of last week have been fully sustained. The cool weather has started up the usual fall trade, and activity is the order of the hour. In selecting out the best consignments (with the exception of one round lot taken by merchants from Dakota Territory), our demand is chiefly local. Extracted honey has not been sought for to any extent, yet there is an improvement over last week in the amount sold. Comb honey, extra white 1 lb. sections, 18¢; comb honey, extra white 1½ to 2 lb. sections, 15¢@17¢.

BEESWAX—Steady and quiet, at 23¢@35¢, as to color, etc.

R. A. BURNETT, 161 South Water St.

SAN FRANCISCO.

HONEY—There is a moderate supply of comb and extracted of common quality, but offerings of extra choice comb are very light. The sales being effected are within range of unchanged figures. White to extra white comb, 16¢@20¢; dark to good, 10¢@13¢; extracted, choice to extra white, 7½¢@8½¢; dark and candied, 8½¢@—

BEESWAX—Wholesale, 27¢@28¢.

STEARNS & SMITH, 423 Front Street.

ST. LOUIS.

HONEY—Quiet sale. New comb 14¢@15¢; fancy small packages higher; strained and extracted 7¢@7½¢.

BEESWAX—Easy, at 24¢@25¢ for choice.

W. T. ANDERSON & Co., 104 N. 3d Street.

CLEVELAND.

HONEY—New honey continues in good demand at 18¢@19¢ for choice 1 lb. sections, and such are readily placed as fast as received; 2 lbs. not so active, at 16¢@18¢. Second quality sells 14¢@17¢. Extracted not in demand.

BEESWAX—None in Market.

A. C. KENDEL, 115 Ontario Street.

BOSTON.

HONEY—We quote our market at 18¢@20¢ for 1 lb. white clover; 18¢@19¢ for 2 lb. white clover. Extracted is in good supply, and selling from 9¢@10¢.

BEESWAX—Our supply is gone; we have none to quote.

BLAKE & RIPLEY, 57 Chatham Street.

CORRESPONDENCE

For the American Bee Journal.

Non-Excellencies of the German Bee.

T. A. HOUGAS.

Mr. Osburn is correct in saying, on page 408, "there are few that have the boldness to come forward and advocate the good traits of character of the German bee" (not the blacks). His next sentence is, "I know that one who has the independence to advocate the good qualities of the German race of bees, must expect to call down upon his head the scorn, the disapprobation and disgust of the great mass of bee-keepers of to-day." While we are not disposed to "scorn" or "disapprove" any one for their views on any subject, yet we beg to disagree quite frequently. In this case we must disagree upon the good (?) qualities of the German race of bees.

"In the first place they excel as comb builders." While we must admit the truthfulness of this statement in a large degree, yet it is not strictly true, all points considered. For an instance, take a colony of German bees and place them in an empty hive; let them fill it with comb, brood and honey; then take a colony of Italian bees, place them in a similar condition. As soon as both are full of comb, brood and honey, place them in the August sun, and see which combs are the first to give away. I have seen hives that were filled by the German bees, standing side by side of those filled by the Italians, and the contents of the former were all melted down, while the latter stood it all right.

"They excel as rapid workers to draw out foundation;" perhaps they do; but I can see no difference.

"They excel as pioneers to strike out from the brood-chamber (and out of the queen's way) to store their honey;" yes, and they excel in striking straight out for you, when you lift a frame out of the hive.

"They excel in keeping their hives full of workers to gather the crop;" this has never proved true, in the least, under my observation.

"All other conditions being favorable, they excel as non-swarmlers, when you give them plenty of room."

"All other conditions being favorable." 'Tis well said; they need favorable conditions.

"When you give them plenty of room." Again, well said; who would not excel under such circumstances?

In the above mentioned article there is nothing told but the good (?) qualities of the German bee, but he does not stop to tell that 100 German bees to every one Italian bee will take wing while handling. Mr. O. forgot to tell that an Italian bee will live and grow fat on flowers that a German bee would starve to death on. Perhaps he does not rise early enough in

the morning to see that the Italians are at work from one-half to three-quarters of an hour earlier in the morning, and as much later in the evening than the German race. It seems to me that this would make considerable difference in a whole season's work. All are too familiar with the bee moth to need any notice. If Mr. O. tries the cross he speaks of, I would advise him to lay in a supply of bee veils, gloves and smokers for mutual safety.

Henderson, Iowa, Aug. 27, 1883.

Rural New Yorker.

The Outlook in Apiculture.

PROF. A. J. COOK.

In the way of growth and real progress, bee-keeping compares well with other manual labor pursuits. It is capable of proof that in the past ten years the number of bee-keepers, the product in honey, and the cash value of the proceeds of the apiaries in the country have more than doubled. The apiarian apparatus, and the methods of manipulation have also, in many respects, been entirely revolutionized. The last decade knew nothing of extracting, as practised to-day; nothing of our exquisite sections for comb honey, nothing of the valuable comb foundation. The associations devoted to apiculture number more in single States to-day than they did in the entire country ten years ago. We have nine periodicals ably conducted, one of which is a weekly. There are four or five excellent books which are selling by thousands. And our agricultural associations, instead of offering a few cents, or, perhaps, a dollar as a premium for honey, and sandwiching the honey in between syrup and sugar, now give most liberal premiums, and in some cases furnish a separate building for the exhibition of honey bees and the varied apparatus belonging to the apiary.

This growth is not the result of over-praise, as some assert. True, as with all pursuits, success finds a ready tongue, while failure hides its head. Still it is true that as many who enter this field thoroughly prepared by study and practice, reach the goal of their aims as in any other business or profession. From one to two thousand dollars are enough capital to invest in the business. This capital, rightly managed, is sure to give a return of from 100 to 150 per cent. One person can care for 100 colonies of bees, and not work hard for more than three months of the year; while with a competent assistant for three months in the year he can care for double the number. I think few apiarists of skill and experience would agree to sell the average product of each colony for \$15. We see then, that in the small amount of capital invested and the proceeds from the well managed apiary, apiculture takes high rank.

It is true that with a large apiary, the labor for May, June and July, and possibly for August and September, is really arduous; but when it is re-

membered that there are many ladies that successfully manage and care for quite large apiaries, we cannot doubt but that with wise management the labor may be reduced, so as not to be a grievous burden. Some of the ablest apiarists in our country are quite delicate women, who undertook apiculture to brace up declining health. In it they found health, money and pleasure, surely a worthy trio.

Many declaim against apiculture as an avocation. Only the specialist, say they, should keep bees. This would take from our ranks Dzierzon, Langstroth and many others of our first apiarists. One of our graduates who by profession is a preacher, wrote me a year ago that the proceeds of his bees exceeded his salary. Last year his honey brought even more; and this spring he sold \$1,150 worth of bees, and had 80 colonies remaining. Another graduate has a farm and also keeps bees. I asked him a few days since why he did not sell his bees, as he was speaking of too much work. "I had better sell my farm," he said, "as my bees pay the best."

Apropos of the above, it is said, that if one wishes to learn bee-keeping, he had better go to some large apiarist and let the college alone. Reason and statistics argue otherwise. Culture, or a well trained mind, wins in every race. Bee-keeping demands good judgment and trained observation. The college course tends to develop both. Many of our graduates are now keeping bees, and all with marked success. Four of these have a national reputation, and two are known in all bee-keeping countries.

For the American Bee Journal.

The Black Sage of California.

A. W. OSBURN.

On page 427, of the BEE JOURNAL, is an article taken from the California *Rural Press*, on "Honey Flora—White Sage." The writer cannot be as well posted about the honey-producing plants of California as he might be, or he would not have failed to give the black or button sage credit for what is justly its due. The two sages (white and black) stand in about the same relation to one another that the white clover and basswood do to one another. The nice white comb honey that goes on the market is called white clover honey, while in all localities where basswood is plenty, I do not think there is one ounce of white clover to every 10 pounds of basswood honey. So in California with the two kinds of sage, bees will not work on white sage on a range where the black sage grows. The latter yields honey in a much larger quantity than the former, and of a much finer quality, and yields all day, from daylight till dark; and I doubt if in the whole world better honey can be produced than comes from the black or button sage; clear as a crystal; almost white, with a good body, and in flavor it is impossible to get anything finer.

The white sage yields honey in the forenoon, but not much in the afternoon. It is thin when compared to that which comes from the black, and in color and flavor it does not rank in the same class with the former at all.

I know whereof I speak. I have seen the two grow on the same bee range, very many times, but not on the same ground. For the habits of the two plants are as unlike as need be. The black sage chooses the sides of mountains and foot hills. It can hardly, if ever, be found on flat land, but the highest peaks of the coast range of mountains in California, seldom get too high for the black sage to thrive and do well, and this is one of the best evidences of its superiority as a honey plant. It is a long and well-established fact, that the best honey producing plants grow on the highest land. The white sage is a lover of the bottom lands of the canyons, along the banks of streams, very rarely getting 200 yards from high water mark. It throws up a number of stalks from the root every spring, that bloom the same season, and then die. It does not resemble a bush or shrub, but has the appearance of a weed. It is a most profuse bloomer,—while the black sage is a bush, a shrub, with hard solid wood, hence the substantial foundation for the best honey in the world to come from. When there is plenty of rain the black sage blooms for six or eight weeks, yielding honey like but very few plants do yield, and of a quality that is XXX.

Water Valley, N. Y.

For the American Bee Journal.

The Season in Southeastern N. Y.

HOWARD T. BUSH.

I began the season with 41 colonies, spring count; it was very cold and wet all the spring. Apple bloom came the last of May. My bees gathered some honey from it, and about that time I transferred 23 colonies, and I fed them the waste honey that I obtained from those that I stimulated to brood-rearing. I worked them on Mr. Doolittle's plan, and when my honey harvest came, on June 6, my bees were very strong, but it was cold and wet. Raspberry bloomed on June 6, and my first swarm came out on the 9th, and I began to extract on the 15th; and from then until the first of July, I took off 1,000 pounds of honey (700 pounds of comb and 300 pounds of extracted). White clover came in bloom about June 10, but it was so very wet that the bees did not work on it. In the last week in June, sumac came, and I never saw such a bloom. The weather became clear, and I never saw bees gather honey so fast. On July 4, my bees began to kill the drones, and in one week you could not see a single drone. On July 15, basswood bloomed, but there is not enough here for bees to make any more than a living, and hardly that, so my bees have been idle from July 20 until about two week ago; then buckwheat bloomed.

About Aug. 1, it became very dry, and we have had no rain to speak of since; we have cold nights, so cold that bees cannot work until 8 a. m.; they work while the dew is on, and then lie still the rest of the day. We have had two frosts this week; the bees just about make a living. I shall not get a pound of buckwheat honey; goldenrod is coming in bloom, but if it stays dry, I shall get no honey from that source, so I think that my honey harvest is over for this season. I used two-pound, one-pound and half-pound sections. I sell two-pound and one-pound sections for 15 and 20 cents per pound, and half-pounds for 25 cents a pound, in my home market; and I get 10 cents for extracted. I have sold all of my half-pound sections but a few that I want to exhibit at our county fair, on the first of October. I mail a few bees from my apiary. I want to know what kind of bees they are. Are they the brown German or black bees? The queens are very large, about one-third larger than Italian queens.

Monticello, N. Y., Aug. 31, 1883.

[They are of the brown German race.—Ed.]

Read before the Maine Convention.

Profitable Pasturage for Bees.

ISAAC F. PLUMMER.

By request of one of the members of this association, I have taken up this subject to give you a few thoughts on my experience and observation in regard to planting and cultivating flowers, trees, shrubs, etc., for artificial pasturage for bees.

I have not had great experience in this line, but I have had enough to know that to a certain extent it pays to plant for bees, and when we are planting fruit trees and small fruits, we should remember we shall some day reap a rich harvest of honey as well as a harvest of golden fruit, and thus reap two profits to pay for our labor. I believe, and have always thought that orcharding and the culture of small fruits should go hand in hand with bee-keeping for the reason of the honey which fruit trees will produce when they are in bloom. So let us greatly extend our orchards, and in a few years we shall see our bees getting more honey, and that we are getting more and better bee pasturage in our State.

There are but few farmers and bee-keepers in our State who have not more or less waste pieces of land around fence corners, roadsides and side hills; and what better purpose can such pieces of land be put to than by sowing them to sweet clover, which is one of the greatest honey-producing plants we have in this country, and how much better such pieces of land would look to the eye and at the same time have the bees gathering honey, the sweetest of all sweets from the flowers that such places will produce by a little of our time and care spent in such a noble purpose. Who says it will not pay? I for one say it will pay.

Another great honey-producing plant, and one that will hold in bloom from July to the first of September or October, is a plant called "borage." It has a blue flower, and is a very attractive flower for either field or garden culture, but it needs a deep rich soil in order to grow to perfection. I sowed some in my garden last spring. It came up well, made a very fine and rapid growth and bloomed finely. It was just remarkable to see how bees worked on it. Its flowers kept dropping and kept blossoming until the dry weather dried it all up, and I know it would have kept in bloom a number of weeks longer if it had not been for the drouth. I like to see the bees work so well on this plant, that I shall sow a lot another season, if nothing prevents.

Of the other honey-producing plants that are highly recommended, some of which I know by experience are very good for bees, and will pay to cultivate on a small scale. To go with bee forage may be mentioned the following: Catnip, motherwort, boneset, figwort, spider plant, mignonette, Chinese mustard, cleome, golden honey plant, etc. I think if we give this branch of our business the same attention we give to other branches of bee culture, we soon will see our bees gathering more honey, and if we get more honey we shall get more money out of our bees. Now let us try and see what we can do to advance bee-culture in our State, and if we can do so by planting for our bees, let us do it; and if we can do so by improving our hives and honey boxes, let us do so by all means, and I know by improving our bees and breeding them up to higher standard of excellence, and at the same time give them plenty of flowers from which to gather honey, that we must be successful in bee culture in this State and in all other States. I will bring this to a close by saying to Maine bee-keepers, plant largely of honey-producing plants, and you will not be sorry for your time, pains and the pleasures it will give you, and the land that you will use for this purpose will be well improved.

For the American Bee Journal.

Bee-Keepers' Week at the Southern Exposition.

G. W. DEMAREE.

The Southern Exposition Company is composed of wealthy business men who, of course, know nothing of bee-culture. It was hardly to be expected that they would bestow special favors upon bee-keepers; hence, it became necessary to apply to the Agricultural department of our State for accommodations. The same course was pursued by the Horticultural Societies, and nobly did that department respond to our wishes. Prof. Todd, chief manager of the Agricultural department of the State of Kentucky, is a man of broad views, and so interested was he in our new (?) enterprise that he gave us special favors and attention. Had we known before

hand that our enterprise would have been so lightly favored by the managers of the Exposition, and so highly appreciated by the public, we would have gone prepared to surprise the "natives." As it was, our honey and bee show was a credit to Kentucky apiarists.

The table erected for our accommodation stood in a conspicuous place; was about 5 feet wide, and covered with snow white cloth, and was extended in length as needed. Much of the honey was displayed in fancy shape, but the greater part of it was plain, neat, and attractive, and beyond question was admired most of all. People are used to gaudily labeled tin cans, and beautifully colored confections, and have learned to know that the fancy outside gives no guaranty of the purity of the article within. It seemed to me that the tin cans of all sizes were a failure, especially the very small sizes. These were covered with exaggerations in the form of labels.

It was amusing to hear the remarks made by persons in the mighty crowds that gathered about the tables to see the Honey and Bee Show. "Them little tin cans look too much like salve boxes." "O! ain't that charming honey in those square glass jars." "Those tall glass goblets are beautiful." "Look at that comb honey; wonder if the bees made it in them cases." "La, if they haven't got bees making honey right in the Exposition." "Wonder what them bees are making honey out of." "That's the queen is it? Well, now, where is the king?" "Won't they improve on honey before they are done experimenting?" This last remark was directed to me, and I answered: No, God makes pure honey, and the bees gather it from his ocean of flowers. Man makes glucose and calls it honey, and poisons his fellows for a few paltry dollars. These are the facts in a nut-shell.

Kentucky apiarists will not soon forget "Bee-Keepers' Week" at the great Southern Exposition. I would like to mention the names of the distinguished bee-keepers from many parts of the United States, who "hunted me up" to grasp my hand, during bee-keepers' week, but I could not do it without forgetting some whose memory is henceforth dear to me. I will be pardoned, however, for mentioning the name of W. S. Hart, of New Smyrna, Fla., because he came from the uttermost parts of the Union to visit us. Mr. Hart proposes to be at the Toronto Convention before he returns home. I am sure that all who meet him will not only find him a master in apiculture, but a most congenial friend and gentleman. The sessions of the Kentucky State Society were well attended, and the proceedings very entertaining. The assembly of bee-keepers was at no time very large, owing to the many things to attract at the Exposition, and from the further fact that many of the members of the society had to look after their honey and bees on exhibition. Still, Dr. Allen was heard to remark that it was the "best meeting ever held by the society."

I believe I learned something during "bee-keepers' week" about preparing honey for the market. I believe it a mistake to put flashy labels on small honey packages. It is too suggestive of the trashy goods so commonly seen in family groceries. These extravagancies have had their day, and people are getting tired of being cheated by outside appearances. The trade will have much more confidence in a plain label that gives the name of the article and the name and address of the producer.

At the honey show the competition for the first prize on comb honey was doubtless very sharp. I cannot see how it could have been otherwise, as so many fine combs so nearly alike were in the display. There was more difference, however, in the extracted. Extracted honey may be extra good, good, common and indifferent, just in proportion to the good management of the apiarist.

During the latter part of last June a neighbor of mine informed me that the "yellow bees" were working thick on his red clover. I visited the field and found my bees working busily on the red clover. Bees were gathering rapidly from the white clover at the same time. This led me to observe closely, and I believe that nine out of ten of the bees which were visiting the red clover were of the lightest strain of bees in my apiary. I thought but little about the matter at the time, as I had never got more than 20 pounds at two different times, heretofore, that I knew to be red clover honey, and this was in the comb, and gathered from the second crop of clover, and late in the season. In the former case the work was done on the red clover, in the best of the white clover harvest, and on the first crop of red clover bloom.

A short time after this I extracted some six or eight hundred pounds of the whitest and thickest honey I ever drew from the extractor. When I saw it was extra white, thick honey, I kept it by itself. From this lot of honey I made up my exhibit of extracted honey, and it took the first prize at the Exposition. Mr. Muth, of Cincinnati, sampled this honey, and expressed his belief that it was too white for white clover honey, and gave it as his opinion that it was red clover honey. I am able to identify at least 6 colonies that produced more or less of this remarkably white, thick honey. Although I have seen my bees working on red clover once in awhile, I have heretofore had but little faith in "red clover bees," and I yet suspect that the seasons must be extra good so as to fill the deep tubes of the clover blossoms pretty well with nectar in order that any bees yet imported to this country can reach it sufficiently to obtain surplus honey. Nevertheless these colonies will receive extra care for future experiment.

The Kentucky Bee-Keepers' Society has set on foot a scheme—if successful—which will be of much importance to those who contemplate making honey production a specialty. A committee has been appointed whose duty it will be to collect infor-

mation as to the unoccupied fields suitable to the production of honey in our State, and about everything relating to the adaptability of the State to the bee business. The work will be published in pamphlet form by the society. It is hoped that such a work will be of the greatest benefit to those persons seeking locations for apiaries. The work of the bee-keepers' societies of our country has heretofore been too circumscribed in character. Their proper sphere is too benefit mankind, and in order to do this they must not only be progressive but aggressive in their work. Committees appointed by societies generally do nothing, simply because nothing is expected of them. The fault is with the society. The committee selected for this work is composed of Dr. N. P. Allen, of Smith's Grove, Ky.; W. C. Pelham, of Maysville, Ky.; John T. Connely, of Napoleon, Ky., to which the president of the society was added. With the untiring energy of Dr. Allen at its head, this committee will discharge its duties faithfully.

We have quite a drouth here now, and the prospects for a fall run are not at all flattering at this writing. At the honey show at the Southern Exposition, Mr. A. C. Cunningham, of Salvisa, Ky., took first prize on comb honey, and N. P. Allen, of Smith's Grove, Ky., second prize. Your humble servant won first prize on extracted, and N. P. Allen the second.

Christiansburg, Ky.

For the American Bee Journal.

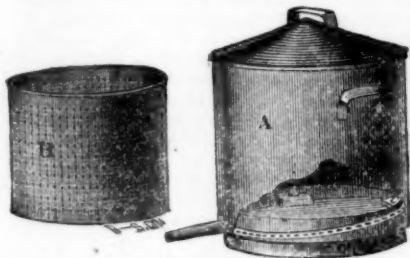
How to Clean Wax.

F. L. DRESSER.

The great demand for comb foundation, and consequent consumption of wax in its manufacture, has so destituted the market that the bee-keeper now finds little trouble in realizing twice the price for his wax that he did a year or two ago. And the prospect is, that unless beeswax is imported to this country in considerable quantities, the price will rise still higher, and bee-keepers may, ere long, consider the question of running some colonies for wax as a prime object. But with the present prices and amount obtainable, the care of wax is a question of dollar and cents to those who wish to make bee-keeping pay. With many this is considered "the woman's job," and given no further thought by them; while the women dread this annual job as much as we do the semi-annual house cleaning. Indeed, I think that I should prefer to blister my hands pounding an old dusty carpet than to burn them raw pounding hot wax through an old coffee sack. I know that I would rather eat my dinner spread on a barrel in the woodshed than to have my clothing and uncovered extremities smeared with such immovable stuff. Yet, with a little expense and proper management, no one need be made uncomfortable, and the over-burdened farmer's wife may be released of the detested duty.

In the first place the bee-keeper should have a box handy into which to throw his old comb; that which is free from cocoons should be kept separate from the rest. If the millers commence their depredations, a little burning sulphur will disturb their feast and make you master.

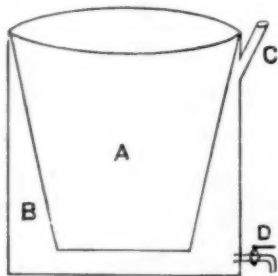
Next a Swiss wax extractor should be provided (see engraving). For



Swiss Wax Extractor.

the sake of some who, perhaps, have not seen one of these instruments, I will attempt a brief description. It consists of a can divided a few inches from the bottom by a tin perforated with large holes near the circumference, and inclining from all directions toward a snout which protrudes from one side on a level with the tin. Above this hangs a basket made of perforated tin, so placed as to hang entirely within the holes punched in the dividing tin. The melting wax will then fall upon the tin and escape by the snout, and not leak through into the water tank below. Connect a tube from the outside with the water tank to enable you to refill the tank without removing the extractor from the stove. Cover the snout with a tight-fitting jacket open to the inside. This will prevent the wax from hardening in the snout, and save much trouble. Make a tight-fitting cover for the whole, and the thing is finished.

You will then want two or three Moulding cans, such as the figure below.



Moulding Can.

A is a frustum shaped can encased in the cylindrical can, b; c is a tube for filling b with water, and d, a faucet, is for emptying the can; c and d connect only with the outer vessel. Thus equipped, you are prepared for business. Select a day in the fall, after the bees are prepared for winter, and you have plenty of time. Drive the women out of the kitchen, and make it as comfortable for yourself as possible. Then prepare your extractor

by filling the water tank with water, and the wax basket with comb. Place a moulding can under the snout, allowing the wax to fall into it, at the same time having b filled with boiling hot water. When the can is full remove it, substituting another. Allow the wax to stand 4 or 5 minutes, then draw off the hot water and fill with cold water. As often as the water around the wax gets warm, replace it with that which is cold. The larger your extractor, and the more moulding cans you have the faster you can manipulate. When the cake is hard dump it out, and the can is ready to use again. The dirt will have settled to the bottom of the cake you have just taken; this you must cut off together with a generous slice of wax, so as to be sure you get it all. You can run the refuse over again and get the wax from that. The cakes are now in a convenient form for shipment, and should be sold in the early spring to some supply dealer. You can continue to get dirt from the wax as many times as you will run it through, but by running it through once it will all be prime yellow. Pure beeswax is pure white, and the slightest color is the sign of the presence of foreign matter; hence, if all the foreign matter be withdrawn the wax will be white. I have a further addition to the extractor by which I can prove my statement. A cake of the dirtiest, blackest wax that I ever saw was made white by this instrument, and it was not exposed to the sun nor any bleaching substance for a moment. But most of us are satisfied to have our wax all yellow and in convenient cakes, and this is the easiest method that I know, or of which I have ever heard.

Hillsdale, Mich., Sept. 1, 1883.

Putnam County, Ind. Convention.

The Putnam County Bee-Keepers' Association met Saturday, Aug. 18, at Greencastle. The attendance was not large, but it was enthusiastic. After the necessary business had been attended to, the different members reported the condition of their bees, and their prospects.

Mr. Tenant, of Greencastle, said that two years ago he started with but one colony. Since that time he had sold over \$100 worth of bees and honey, and had six stands left in strong condition, two of them with upper story full of honey. Mr. Homan, of Russell township, reported that his bees had done well, considering the wet weather in blooming time. He had taken 675 pounds of honey, and increased to 26 colonies. He stated that there were large numbers of bees in the woods. Mr. O'Neal stated that his bees were strong, and since honey harvest had been carrying honey from upper stories to brood-chambers. He had caught a stray swarm of bees, apparently full Italians. The president said he was more certain than ever that bees were profitable property, if properly handled. His bees had done well. He had sold several stands and quite a lot

of honey. The secretary remarked that he had taken some 800 or 900 pounds of honey, and had increased from 20 to 50 strong colonies with but 9 natural swarms. Had sold all his honey at from 20 to 35 cents. Others reported similar success. W. Mason gave an account of a visit to the apiary of W. Smith, of Johnson county, and stated that Mr. S. had sold \$500 worth of honey, and had 65 colonies of bees in chaff packed hives. Mr. S. told him his bees yielded a better income than his 160 acres of good farm land.

Our society meets the third Saturday of each month, the next meeting being Sept. 22.—*Indiana Farmer*.

For the American Bee Journal.

Bees in Shenandoah Valley, Va.

A. R. KOHNKE.

Having gone there, with the object of finding a better locality for bee-keeping than I have about Youngstown, O., I thought I would give to the bee-keeping public what I have seen and learned with reference to our pursuit.

Following the most urgent invitation of Mr. Jordan, of White Sulphur Springs, I went there the last week in July. Arriving at the Springs, which I made my headquarters, I received a most cordial welcome by Mr. E. C. Jordan, the proprietor. This gentleman has some 53 colonies of bees in Langstroth hives; but owing to his time and attention being required to look after the welfare and comfort of his guests, his bees are rather neglected. There are two springs on this place, a sulphur and an iron spring. I have met people who were broken down in health, not being able to obtain relief by any medical treatment, who had been almost entirely cured within a few months at these springs, which, if it proves anything, proves that that particular place is most conducive to health. Space does not permit me to describe that locality in detail, but Mr. Jordan will furnish very willingly any information in regard to it.

As to the bees, their main honey source is blue thistle, which, to judge by what I have seen, must be one of the best, if not the best honey plant this country produces. The honey from it, if not better, is surely equal to white clover; it being of the same color and consistency as the latter, but of a milder taste. Besides blue thistle, locust grows there in great abundance, as also the different kinds of berries, especially blackberries. But where blue thistle abounds white clover is scarce and vice versa.

One day Mr. Jordan and myself drove down to Berryville, about nine miles from the Springs, to visit some bee-keepers there. One of them, Mr. Diehl, who has been quite sick, hence not able to attend to his bees properly, has an apiary of about 200 colonies, blacks, Italians and Albinos. His crop was about 5,000 pounds of comb honey. Another gentleman, in the same town, had 90, blacks, hybrids and Italians, and Mr. Showers, also

of the same place, has about 40. Most of the surplus arrangement had been taken off the hives, in consequence of the honey season having closed, with a faint hope of obtaining some from iron weed, which is said to yield honey some years.

Some other day I went to Winchester, it being about five miles from the Springs, to see the following bee-keepers: Mr. Brown, Mr. Slagle and Mr. Gibbens; found none of the gentlemen at home on account of a picnic excursion, but had access to the largest apiary, kept by Mr. Gibbens, who makes a business of it. I was shown around by Mr. Gibbens' son, a very accommodating young gentleman. Mr. Gibbens works his bees in a very progressive manner. He has used this year, for the first time, the one-pound one-piece sections, using comb foundation starters of a triangular shape, one corner of which nearly touches the bottom of the section. The idea struck me, that comb foundation used in this shape, might keep the bees from building little bits of comb in between, as they have a better chance of clustering than where full sheets are furnished; besides that it would be a saving of foundation to the extent of one-half. I may give right here some more of my experience in my own apiary, and what I have seen in others.

The fact that bees need large quantities of honey to produce a small quantity of wax, has led to the invention of comb foundation machines and the use of comb foundation in brood-chambers as well as for comb honey, in order to save the honey. This may be best to some extent, when honey is not very abundant, but I rather question the expediency to give full sheets of comb foundation in sections for this reason: I have noticed that, when honey is coming in slowly, the bees will draw out heavy walled comb foundation a little; but when it is coming in fast, they do not touch that heavy wall, but build new comb on the foundation given. I used the heavy-walled foundation made on a Given press, and the light-walled made on a Vandervort machine. The light-walled was always drawn out, so that the comb foundation could not be noticed when cutting the comb, but with the other more or less "fish-bone" was left, very often the whole of it. Besides this, I found after the comb was finished, the bees had wax to spare, putting it here and there in little lumps in some empty corner, but especially on the glass at the ends or sides of the sections. For the use of full sheets of comb foundation in the brood-chamber, there are other and more important reasons than the saving of honey and wax in its construction, which I need not enumerate here, as they are too well known; but for sections, I think we can use less to our advantage, using such as can be made on a Vandervort machine only, as far as I know.

Now back to Mr. Gibbens' again. He also had taken most of his sections off the hives, leaving only a small part of those not yet finished, in hopes of obtaining some honey from iron

weed. On the whole, I think by what I have observed, that the Shenandoah Valley is a very good bee country, but, perhaps, no more so than many other localities where more fruit trees are cultivated, which are in great deficiency where I have been.

Youngstown, Ohio, August, 1883.

For the American Bee Journal.

Honey Crop, Marketing, etc.

B. T. DAVENPORT.

I have been much interested in reading the columns of your valuable paper this season, and especially the reports in regard to the present and prospective indications for honey. I like the idea suggested by Mr. Kendall, in last week's BEE JOURNAL, of having a barometer, or honey signal-service, a good one, providing we are careful not to exaggerate our reports, nor make out reports for the whole season at perhaps the very opening of clover, which, if the weather should be propitious, and the bloom as good as it was this season, are apt to be very flattering. It is well to be hopeful at all times, which, as far as I am acquainted, I believe is a peculiarity that bee-keepers have, but in our public reports, we want the facts, and opinions should be given as such only. We too frequently see an otherwise excellent report or letter with no date given, or if a honey report, the kind not mentioned, whether comb or extracted; such articles I mark down about 50 per cent. This was the coldest morning of the season—mercury 41°, but saw no frost. Bees have done fairly here, but too much wet and cool weather for a real good yield of honey. The most of our surplus was gathered during the latter part of June and first half of July from white clover; basswood bloomed considerable, but we obtained no honey from it; it rained nearly all the time it was in bloom, and were the heaviest rains known for years, doing considerable damage to hay that was cut, both in the stack and field. I have been working two apiaries this season, 5½ miles apart. I began with 90 and now have 136 colonies, and have taken off 4,200 lbs. of honey in 1¼ lb. sections, all white, and think there is enough on the hives of mixed honey to make out about 6,000 lbs. This is probably one of the best locations for honey in the state. I found a drone in my Carley apiary (the one away from home), with one very red eye; I saw him twice, while looking through the hive. Auroraville, Wis., Sept. 5, 1883.

For the American Bee Journal.

Bee-Keeping in Utah.

JOHN DUNN.

Bees have not had the attention they should have this year. Some never use an extractor. One bee man told me, the other day, that he had not used one, although he has 6 colonies and is among the oldest hands at the business; but after I had shown

him what I had done with 2 colonies, he said he would get an extractor; but it was like the boy, as I told him, who bought a penny purse to put a half penny in; it was too late now, to get much benefit from the extractor.

Quite a feeling has been made against the use of the extractor, through the remarks of our assessor, who said that foul brood was caused by extractors, and where they were used, foul brood was sure to exist. I talked with him on this subject, and asked him for his proof. Why, said he, I have read it in a book; but when questioned in what book, he said he could not tell where, so I told him to come and I would show him, where larvæ was pulled out, that the bees would put it back, when put in the hive; but I would not advise any one to extract from sections that had much brood in them.

I have extracted about 50 gallons of honey from 10 colonies up to date—increased to 20 this season, and if I had got my sections full of comb, I could have done better. I have used a good deal of foundation.

We should have a good flow of honey; almost every one has an orchard, and own their own house and garden lot, and since the new fence law was passed, almost every one has a patch of clover and lucern, and in the spring, if you take a walk out in the country, you will see the wild flowers, and in the fall, they shine with splendor.

I think that many would keep bees if they were not so fond of stinging, but it is the only thing they have to defend themselves with, and it is a wise provision, for, if it was not so, the poor bees would be abused many times just for fancy. I found spear mint a good thing to rub over the hands; they do not like the smell. I did intend to have 1,000 lbs. of extracted honey this season, and I do not know yet but I may get it. Bees work now on clover, squash, lucern and other plants, and are doing splendidly, so far as I have found out in this country.

Tooele City, Utah, Aug. 15, 1883.

For the American Bee Journal.

Cyprian and Syrian Bees.

B. F. CARROLL.

The anathamas hurled against the Cyprian bees by many who have not thoroughly tested them will cause many apiarists to dispose of their Cyprians before they find out their good qualities.

It is true that the Cyprian bee is a little warlike if not thoroughly understood. I have handled these bees for three years, and I find them superior to the Italians in every respect. First, they are more prolific, and hence have their hives always full of bees, and when you have the bees, you can have the honey if there is any to be had.

Secondly, they defend their hives better; it being almost impossible for a strong colony of Cyprians to be

over-powered and robbed by other bees.

Thirdly, when the extractor is used they are far superior to the Italians by being so easily shaken and brushed from the combs.

Fourthly, they fly faster and further for stores, and have a longer tongue than Italians or blacks, and they work well on the cotton, and this feature alone ought to bring them into favor with the bee-keepers of the South; and

Lastly, the sun never gets too hot for them; I have seen them this year, when the thermometer was at 104° F. in the shade, working right along, as if it was spring-like weather, and my 3 colonies of Italians and one black colony were not even showing a desire to do anything but bring in a little water, and very little of that.

I have one of G. M. Doolittle's best Italian colonies. The bees are perfect beauties, and as gentle as pet chickens, and I have a host of Cyprian colonies just as gentle, and I handle without smoke or gloves.

I have about 25 colonies of Holy Land bees, and as this is my first year to give these a thorough test, I am satisfied they are almost identical with the Cyprians, and their temper is not quite so high strung. There is no doubt they will stand the test. I see some grand reports coming in from these bees from different parts of our broad domain, and it is only a question of time when these bees will be the favorites with American bee-keepers.

Dresden, Texas, Sept. 1, 1883.

Prairie Farmer.

Apiary Talks—Seasonable Hints.

MRS. L. HARRISON.

It is well to observe closely during the honey season, and ascertain from what source the supply is obtained. Where I am "rusticating," in Connecticut, near the sea-shore (Aug. 21), boneset or motherwort, goldenrod, and a species of wild touch-me-not are in bloom, and bees are apparently doing well. For several days it has been showery, and the sun comes out very hot, and the nights are warm, insuring the right condition for the secretion of nectar. Where the early potatoes were raised, *Polygonum* will soon be blooming. The sweet clovers (*melilot*) of the white and yellow varieties, are now ripening their seed, and it should be gathered and scattered in waste places. I saw, lately, the yellow variety which is sometimes called Bokhara clover, growing around the edge of a salt meadow and on rocky ledges. Though it is not a bad weed, it will hold its own when it has gained a foothold.

In most Western and Northern localities, the three or four weeks preceding frost bring on flowers which often afford the very best pasturage of the year. During this late honey flow, encouragement should be given to the rearing of brood, so that there may be plenty of young bees to go into winter quarters. Sometimes

the brood-nest is almost filled with honey, and the queen cannot find a cell in which to lay; a part of the combs should be extracted and returned. Sometimes this fails to insure brood-rearing, as we have found such combs in a few days (during a big flow) to have every cell glistening with honey. We lose our bees the coming winter, "charm we ever so wisely," but we will stand a much greater chance of preserving them if we look well to them now. Some colonies, although prosperous the past season, have queens whose usefulness has departed, and who are decrepit with old age, and should be superseded with a young vigorous one, able to withstand wintry blasts. All after-swarms have young queens, and if they are too small to winter, they might be wintered with an old stock, by first removing the old queen. Colonies that are found to be queenless, or have done laying queens, should have queens given them or united.

Many people complain of moths destroying their bees, when they only moved in when the house was empty, from defect or loss of queen.

What and How.

ANSWERS BY

James Heddon, Dowagiac, Mich.

Bees Balling their Queen.

Will James Heddon please inform me why my bees balled a virgin queen about 12 days old; also, why they balled a dollar queen, which I introduced about 6 weeks ago, and was laying nicely ever since, and was laying when they balled her? They started queen-cells at the same hive. I took her out and put her in a nucleus, and she was laying the next day.

RICHARD GRINSELL.

Baden, Mo., Aug., 27, 1883.

ANSWER.—Bees ball strange queens and queens that for any cause (and some causes are as yet unknown) they are jealous of. Why they should have been entertaining a "sidewise" feeling toward your 12-days old virgin queen, I do not know enough about the minor circumstances to tell. Perhaps because she was aiming at becoming a wrinkled, cross old maid. Workers are quite often suspicious of introduced fertile queens for many days after they begin to lay, and often pounce upon and kill them upon the least provocation, such as opening the hive, when if they had been left undisturbed, they would have acted like dutiful children. I should think a week time enough to lay aside all this jealousy. I have found that to suffice as a rule. I have had colonies

ball their queens on opening the hive; queens that were mothers to every bee in the hive. I have never known a case of the kind, but what the colony was in some way slightly out of perfectly normal condition; a little spring sickness, or clipped queen, or something of the sort.

Wide Frames.

In a recent number of your JOURNAL Mr. Heddon says the wide frames are being superseded. Will he be kind enough to tell us by what, with details sufficient to enable a man of ordinary understanding (not a mechanic) to make them for trial.

RUSTICUS.

ANSWER.—The broad frames are, with many of our leading and recognized most intelligent apiarists, being laid aside for the case system. I cannot, in this space, fully describe the case that I use and prefer, but I will say that the broad frame supers differ from the cases, inasmuch as that the cases, instead of taking frames at all, receive the sections between partitions, without the use of frames or separators. I will refer you to cut Fig. 1, Sec. D, page 659, BEE JOURNAL for 1882.

SELECTIONS FROM OUR LETTER BOX

The Fall Crop.

Bees are storing honey a few hours in the middle of the day. The heart-ease and goldenrod bloom is abundant, but the weather is too dry, and the nights too cool, for a large flow of honey. A good rain and warm weather would give us a heavy flow. The honey crop in this part of the State is not a heavy one, although in a few localities, where strict attention has been given, a fair crop will be secured.

REUBEN HAVENS.

Onarga, Ill., Sept. 4, 1883.

Horse Balm Honey.

Enclosed find a plant for name. I have exhausted my botanical resources without being able to name it. Bees work on it freely, and it undoubtedly yields a large amount of honey. I have a suspicion that the honey is bitter. The plant grows in rich woods. It is not very abundant.

M. MAHIN.

New Castle, Ind., Aug. 23, 1883.

[The plant is the widely disseminated Horse Balm (*Collinsonia Canadensis*). It is hardly possible that the honey is bitter. The plant belongs to one of the most important families (*Labiata*) of honey producers, and is itself pleasantly aromatic.—T. J. B.]

Bees Working on the Spanish Needle.

In the spring of 1883, I had 40 colonies of bees, all Italians but 3. I did not get any clover honey, but got about 600 pounds of linden honey, and increased to 72 colonies. I have not obtained any honey since Aug. 1, though the bees are doing well now, on Spanish needle and buckwheat.

WM. T. SCOTT.

Mill Grove, Mo., Sept. 4, 1883.

Sand Wasps.

I send you a hornet that I saw with a fly in its fore feet. I never saw one like it before. Please say what it is, through the BEE JOURNAL.

J. M. HIBBARD, JR.

Athens, Ohio, Aug. 10, 1883.

[The large insect found holding in its forefeet a bee, is one of the sand wasps (*Pompilidae*), which store their nests with insects, to be used as food by the young. Usually a single species of insect or spider is selected by each kind of wasp, but I am not aware that this or any other wasp stores its nest exclusively with honey bees. The most remarkable thing about their method of hunting is that the wasp stings the prey in a particular nerve centre, in such manner that the captured insect is rendered entirely helpless, but is not killed. In this condition it is packed with others in a hole dug in the ground, accompanied by several eggs of the wasp. When these eggs hatch the young find in the stung insects food still perfectly fresh, because alive, but entirely at their mercy.]

Along with the above, in the box, was a dog-day cicada (*Cicada canicula*'s). It is much like the 17-year "locust," but appears every year. It is quite harmless, except that it bores twigs of trees to deposit its eggs; as soon as hatched the larvæ enter the ground and live on the roots of plants.—T. J. BURRILL, Champaign, Ill.]

Bee-Keeping in Minnesota.

As I am sending for 100 copies of "Honey as Food and Medicine," I will report something of what my bees are doing, and it is a big report for Minnesota, but not in the least over-drawn. My account shows 317 pails of honey. These pails will hold from 15 to 18 pounds each, making in all about 4,755 pounds of extracted, and I have besides 1,624 pounds of beautiful comb honey. This amounts to 6,379 pounds without taking into account the strainings from the uncapped, which would average a pailful a day. I began the season with 32 strong colonies, and kept them warm and well fed during the spring. I now have 90 splendid colonies, 40 of which were not looked through during or since basswood bloom. There are

12 with boxes on that have some sections completed, 2 that have the entire 12 two-pound sections nearly full. I have some colonies that have not swarmed this season. I have a record of 3, 4, 5, 6 and even 7 swarms from one colony. The one giving 6, its first swarm cast three, one of which went into another hive and was killed; but I saved two, making an increase of 8 from that colony. I had combs for all increase. J. E. CADY.

Medford, Minn., Aug. 31, 1883.

Syrphus Flies, etc.

Enclosed find three flies and a bee.

1. I found the flies hovering around the hives, evidently persuaded in their own minds that, if they had their rights, they ought to live there. The bees did not appear to mind them much. What are they?

2. Of what race is the bee enclosed? I am often puzzled about these stripes. How many stripes has this bee? My bees should be Italians, but I see every once in a while the 15th amendment to the constitution there.

R. J. KENDALL.

Austin, Texas, Aug. 26, 1883.

[The insects are the prettily-banded, useful *Syrphus* flies, whose larvæ prey upon plant lice. They do the bees no harm.—T. J. B.]

After a bee is dead and "mashed up" in a letter, it is hard to tell much about it. If it had "stripes" they are not discernible now.—Ed.]

Borage as a Good Honey Plant.

You may put down borage as an extra good honey plant. It commences to bloom in June and keeps up till the hard frosts. My bees have worked at it unceasingly since basswood harvest closed, and are still at it. Last year it was green until the end of October. It is very hardy, and is a perfect weed when it once gets into a garden.

C. W. YOUNG.

Stratford, Ont., Sept. 6, 1883.

A Worker in a Queen-Cell.

The JOURNAL is a welcome visitor to our home every week, and while perusing its columns, last night, I found an experience somewhat like one I had not long since. I have reference to a "Curious Freak of Bees," by A. Rickenbacher, on page 433 of the BEE JOURNAL. A few days ago I had a nice lot of queen-cells that I thought would hatch in a day or two. I lifted them out in the sunshine to see how nearly ready they were to hatch, and to my surprise several had already emerged from the cells, and were walking around on the comb. I cut out all the cells that were not uncapped, and when I had put one in each hive or nucleus that I had prepared, there was one left. I cut it open, and found in it a worker bee in the prime of life. I think that worker bee crawled into the cell just when the queen got out; the cap not being cut clear off, sprung shut, and the bees sealed it.

A. R. NISBET.

Dobyville, Ark., Sept. 1, 1883.

Honey Already Candied.

I send you a sample of my honey. It has all candied or turned to sugar. Will you please tell me, in the BEE JOURNAL, why it candied so, and can I winter my bees on it? I started last spring with one colony of bees; the bees swarmed three times, and the four colonies have gathered about 300 lbs. of honey in the boxes, and body of the hive, and it is all candied or turned to sugar. Will the bees winter on a syrup made by melting up the outside combs, adding a little water and skimming off the wax? Other bee-keepers living near here, are complaining of their honey candying, like mine.

E. HAMILTON.

Centre Conway, N. H., Sept. 4, 1883.

[Some honey will "candy" much more readily than that gathered from other kinds of bloom. Linden honey candies very quickly after being removed from the hives. You do not say what it was gathered from, but it is evidently caused by the peculiar flowers from which it came. You can use it for wintering, either as it is, or by making it into a syrup, as you suggest.—Ed.]

Good Honey Harvest in Maine.

Bees have done uncommonly well in Maine, this year. I have one swarm that came out in June that has gathered 135 pounds of honey, mostly in one-pound sections. I am 77 years old.

LUCIAN FRENCH.

Dexter, Maine, Aug. 30, 1883.

Queens with Scarlet Wings.

I discovered a new kind of queen (to me) in the last part of May. I took the same queen and inserted it in a colony of bees, and the colony swarmed twice, and I received 175 pounds of honey from each. I think that these queens are more profitable than Italian queens. I think that I will transform my whole apiary with these bees; the queens have three yellow stripes, and their wings are scarlet. Please give me some information about the same.

PROF. HUGO SONTAG.

Cucamonga, Cal., Aug. 31, 1883.

[It is evidently another "case of sporting," many of which have heretofore been reported in the BEE JOURNAL. The regulation "bands" show them to be Italians.—Ed.]

A Short Crop.

The crop of honey from this section is very short. Basswood was a failure. A colony weighing 6½ lbs. of bees, gathered but 15 lbs. during basswood bloom. The fall crop, so extraordinary last season in the flow, is about as extraordinary the other way, this season. "In a good season every bean-pole sweats honey, but in a bad one, no flower secrets any;" so said our German friends across the water; and the two seasons have made the demonstration here.

JESSE OREN.

La Porte City, Iowa, Sept. 5, 1883.

Western Bee-Keepers' Association.

The first annual meeting of the Western Bee-Keepers' Association will be held at Independence, Mo., Sept. 20 and 21, 1883. The association being situated in the centre of one of the best honey-producing sections of the country, and easy of access from all parts of the country, it is desirous that as many bee-keepers as can possibly attend will meet with us, and help to make it as interesting and enjoyable as circumstances will permit. In connection with the general business of such meetings, the members of the association have made arrangements for a Bee and Honey Fair, free to the world. The following premiums are offered. Members of the association will not compete for premiums offered by itself.

By the Association.

Best display of honey (comb and extracted) not less than 20 lbs. of each, in marketable shape.	\$25 00
Best 25 lbs. of comb honey.....	10 00
" " " extracted ".....	10 00
Best queen, with her bees.....	10 00
Best display of apianian implements, including all the principle fixtures used in the apiary.....	15 00

Special Premiums free to all.

By the business men of Independence: Best 50 lbs. of comb honey in the best marketable shape, \$50.00.

By the *Sentinel*: Best package of comb honey not over 2 lbs., one year's subscription.

Judges not members of the association: All articles for display or premiums must be entered on the first day of the meeting.

Parties from a distance, who may wish, can consign their goods to either of the members of the committee. The members of the association will do their very best to provide entertainment for all persons who may visit us.

J. D. MEADOR,
L. W. BALDWIN,
C. M. CRANDALL,
JAMES A. JONES,
P. BALDWIN.
Committee.

The next meeting of the Tuscarawas Valley Bee-Keepers' Association will be held at Newcomertown, Ohio, on Wednesday, Sept. 26, commencing at 10 a. m. All interested are cordially invited to come and bring anything for exhibition that will interest bee-keepers.

J. A. BUCKLEW, Pres.
Clarks, Ohio.

HERBERT DENMAN, Sec.
Coshocton, Ohio.

Bee Pasturage a Necessity.—We have just issued a new pamphlet giving our views on this important subject, with suggestions what to plant, and when and how. It is illustrated with 26 engravings, and will be sent postpaid to any address for 10 cents.

Special Notices.

Examine the Date following your name on the wrapper label of this paper; it indicates the end of the month to which you have paid your subscription on the BEE JOURNAL.

For safety, when sending money to this office get either a post office or express money order, a bank draft on New York or Chicago, or register the letter. Postage stamps of any kind may be sent for amounts less than one dollar. Local checks are subject to a discount of 25 cents at Chicago banks. American Express money orders for \$5, or less, can be obtained for 5 cents.

We wish to impress upon every one the necessity of being very specific, and carefully to state what they desire for the money sent. Also, if they live near one post office, and get their mail at another, be sure to give us the address we already have on our books.

How to Create a Market for Honey.

We have now published another edition of the pamphlet on "Honey as Food and Medicine," with more new Recipes for Honey Medicines, all kinds of cooking in which honey is used, and healthful and pleasant beverages.

We have put the price *still lower*, to encourage bee-keepers to scatter them far and wide. Single copy 5 cents, postpaid; per dozen, 40 cents; per hundred, \$2.50. 500 will be sent postpaid for \$10.00, or 1,000 for \$15.00. On orders of 100 or more, we will print, if desired, on the cover-page, "Presented by," etc., (giving the name and address of the bee-keeper who scatters them). This alone will pay him for all his trouble and expense—enabling him to dispose of his honey at home, at a good profit. Try it, and you will be surprised.

Subscription Credits.—We do not acknowledge receipt of each subscription by letter. The label on your paper, or on the wrapper, shows the date to which your subscription is paid. When you send us money, if the proper credit is not given you, within two weeks thereafter, on your label, notify us by postal card. Do not wait for months or years, and then claim a mistake. The subscription is paid to the end of the month indicated on the wrapper-label. This gives a statement of account every week.

Trial Trip—25 Cents.

As the season for Fairs has arrived, and wishing to be able to reach several thousands of the old-fashioned bee-men, and by the aid of the BEE JOURNAL to lift them up to higher ground, adopting newer methods and progressive ideas, we make the following very liberal offer: We will send the Weekly BEE JOURNAL *three months on trial, for 25 cents*. In order to pay for getting up Clubs, we will give a copy of Fisher's Grain Tables, or Scribner's Lumber and Log Book, to any one who will send us five trial subscriptions (with \$1.25); for a club of *ten* we will give a cloth copy of Bees and Honey; for a club of 15, a cloth copy of the 7th edition of Cook's Manual of the Apiary; for a club of 25, we will present both the Manual and Bees and Honey. If any one wants these Books for nothing, here is an excellent opportunity to get them for a little exertion.

The Apiary Register.

All who intend to be systematic in their work in the apiary, should get a copy and commence to use it.

For 50 colonies (120 pages).....	\$1 00
" 100 colonies (220 pages).....	1 50
" 200 colonies (420 pages).....	2 00

The larger ones can be used for a few colonies, give room for an increase of numbers, and still keep the record all together in one book, and are therefore the most desirable ones.

Preparation of Honey for the Market, including the production and care of both comb and extracted honey instructions on the exhibition of bees and honey at Fairs, etc. This is a new 10 cent pamphlet, of 32 pages.

Do not send coins in a letter. It is dangerous and increases the postage unnecessarily. Always send postage stamps, for fractions of a dollar, and, if you can get them—one-cent stamps; if not, any denomination of postage stamps will do.

Special Notice.—We will, hereafter, supply the Weekly BEE JOURNAL for one year, and the seventh edition of Prof. Cook's Manual of the Apiary, bound in fine cloth, for \$2.75, or the Monthly Bee Journal, and the Manual in cloth for \$1.75. As this offer will soon be withdrawn, those who desire it should send for the book *at once*.

Bingham Smoker Corner.

Large Smokers need wide shields. Bingham's have them, and springs that do not rust and break, and bellows that sparks and smoke do not enter. The Conqueror has all improvements made to date, and a 3x7 inch stove, and 5x7 inch bellows. Sent post-paid for \$1.75. Address,

BINGHAM & HETHERINGTON,
Abronia Mich.

CYPRIAN CONQUERED.—All summer long it has been "which and tother" with me and the Cyprian colony of bees I have—but at last I am "boss." Bingham's "Conqueror Smoker" did it. If you want lots of smoke just at the right time, get a Conqueror Smoker of Bingham.

G. M. DOOLITTLE,
Borodino, N. Y.,
Aug. 15, 1882.

EXCELLING ALL.—Messrs. Bingham & Hetherington, Dear Sirs:—I am now selling your Smokers almost exclusively. You are excelling yourselves in smokers all the time.

Respectfully,
J. G. TAYLOR, Patented, 1878.
Austin, Texas, May 10, 1883.

THE VERY BEST.—The Bingham "Conqueror" Smoker is the very best thing I have tried in that line. M. M. LINDSAY.
Fulton, Tenn., July 24, 1883.

During the following three months, Bingham Smokers will be sent post-paid, per mail, on receipt of the following prices:

The "Doctor" (wide shield)—3½ in. fire tube, \$2.00
The Conqueror (wide shield)—3 in. fire tube, 1.75
Large (wide shield)—2½ in. fire tube, 1.50
Extra (wide shield)—2 in. fire tube, 1.25
Plain (nar. shield)—2 in. fire tube, 1.00
Little Wonder (nar. shield)—1½ in. fire tube, .65
Bingham & Hetherington Uncapping Knife, 1.15

With thanks for letters of encouragement, and the absence of complaining ones, we tender to our thirty-five thousand patrons our best wishes.
Very Respectfully Yours,

BINGHAM & HETHERINGTON.
Abronia, Mich., June 1, 1883.

Our Premiums for Clubs.

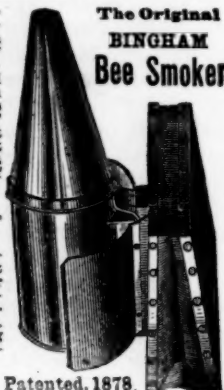
Any one sending us a club of two subscribers for 1 year, for the Weekly, with \$4, will be entitled to a copy of Bees and Honey, in cloth, postpaid.

For three subscribers, with \$6, we will send Cook's Manual, in paper, Emerson's Binder for the Weekly, or Apiary Register for 50 colonies.

For four subscribers, with \$8, we will send Cook's Manual in cloth, or Apiary Register for 100 colonies.

For five subscribers, with \$10, we will send the Apiary Register for 200 colonies, Quinby's New Bee-Keeping, Root's A B C of Bee Culture, or an extra copy of the Weekly BEE JOURNAL for one year.

To get any of the above premiums for the Monthly BEE JOURNAL send double the number of subscribers, and the same amount of money.



The Original
BINGHAM
Bee Smoker

Books at Fairs.—Those who make an exhibit at Fairs will find that an assortment of Books and Pamphlets would sell and leave them a profit for handling. We will send such, postage prepaid, at 25 per cent. discount; or if the purchaser pays express charges, we will supply any of our own publications at 40 per cent. discount.

Emerson Binders—made especially for the BEE JOURNAL, are lettered in gold on the back, and make a very convenient way of preserving the BEE JOURNAL as fast as received. They will be sent, post-paid, for 75 cents, for the Weekly; or for the Monthly, 50 cents. They cannot be sent by mail to Canada.

The new two cent rate of postage for letters goes into effect on October 1. Three cent postage stamps will then be but little used. For all fractions of a dollar sent to us hereafter we should prefer either one-cent, or else five or ten-cent postage stamps. Do not send coins in any letter.

Fairs.—To any one exhibiting at Fairs, we will send samples of the BEE JOURNAL and a colored Poster, to aid in getting up a club. The Premiums we offer will pay them for so doing. For a club of 8 subscribers to the Monthly BEE JOURNAL, or 4 Weekly, we will present Dzierzon's Rational Bee-Keeping, price \$2.00.

Do not let your numbers of the BEE JOURNAL for 1883 be lost. The best way to preserve them is to procure a binder and put them in. They are very valuable for reference.

We carefully mail the BEE JOURNAL to every subscriber, but should any be lost in the mails we will cheerfully send another, if notified before all the edition is exhausted.

To give away a copy of "Honey as Food and Medicine" to every one who buys a package of honey at Fairs, will sell almost a fabulous quantity of it.

Constitutions and By-Laws for local Associations \$2.00 per 100. The name of the Association printed in the blanks for 50 cents extra.

FDN MILLS 10 INCH \$15.00
W.C. PELHAM
MAYSVILLE KY

37A1y

SELLING OUT all the Black Queens by mail 25c. each; with 1 lb. bees, by express, \$1.00. Hybrid Queen by mail, 50c.; with 1 lb. bees by express, \$1.25. Italian Queen, \$1.00 by mail.
E. S. HILDEMAN, Ashippun, Dodge Co., Wis.

BEES and HONEY,

OR THE

Management of an Apiary for Pleasure and Profit; by

THOMAS C. NEWMAN.

Editor of the Weekly Bee Journal.

925 West Madison Street, Chicago, Ill.

It contains 100 profusely illustrated pages, is "fully up with the times" in all the improvements and inventions in this rapidly developing pursuit, and presents the apiarist with everything that can aid in the successful management of the Honey Bee, and at the same time produce the most honey in its best and most attractive condition.

Appreciative Notices.

A neat and abundantly illustrated hand-book of apiculture.—American Agriculturist, N. Y.

Its chapter on marketing honey is worth many times its cost.—Citizen, Pulaski, Tenn.

Contains all the information needed to make bee-culture successful.—Eagle, Union City, Ind.

Just such a work as should be in the hands of every beginner with bees.—News, Keithsburg, Ill.

Valuable for all who are interested in the care and management of bees.—Dem., Allegan, Mich.

Engravings are fine. Gotten up in the best style, and is cheap at the price.—Farmer, Cleveland, O.

Carefully prepared for beginners.—Farmers' Cabinet, Amherst, N. H.

A very valuable work to those engaged in bee-raising.—News, Prairie City, Iowa.

We advise all who keep bees to send for this excellent work.—Journal, Louisiana, Mo.

Carefully prepared, and of vast importance to bee-raisers.—Indianian, Clinton, Ind.

New and valuable, and embellished with 109 beautiful engravings.—Democrat, Salem, Ind.

Much practical useful information, in a cheap form.—Daily Standard, New Bedford, Mass.

The most perfect work for the price ever yet produced on the subject of bee-culture.—Anti-Monopolist, Lebanon, Mo.

A manual, containing all the newest discoveries in the management of these little workers.—Plain Dealer, St. Lawrence, N. Y.

Full of practical instruction, that no one who contemplates keeping bees can do without.—Farmers' Journal, Louisville, Ky.

It comprises all that is necessary for successful bee-culture, save experience and good judgment.—Daily Republican, Utica, N. Y.

Gives minute details for the management and manipulations necessary to make bee-keeping a success.—Col. Valley and Farm.

Written in an interesting and attractive manner, and contains valuable information for all readers, even though they be not directly interested in the care of bees.—Sentinel, Rome, N. Y.

It embraces every subject that can interest the beginner in bee-culture. The engravings perfectly illustrate the text.—Farm and Fireside, Springfield, O.

Embraces every subject of interest in the apiary, giving very thorough details of the management and manipulations necessary to make bee-keeping a success.—Farm, Longmont, Colo.

It is a valuable and practical book, and contains a complete resume of the natural history of the little busy bee, as well as of all that one needs to know in their care and management.—Chicago Herald.

Contains a vast fund of information in regard to bee-culture. He who would keep abreast of the times must keep posted in all the improvements in his line. We advise all interested to get a copy of this book.—Daily Times, San Bernardino, Cal.

Describes all the newest discoveries in the art, by which the production of delicious and health-giving honey is obtained, as well as how to prepare it for the market in the most attractive shape.—Signal, Napoleon, O.

It embraces every subject that will interest the beginner. It describes all the newest discoveries in the art by which the production of delicious and health-giving honey is obtained, as well as how to prepare it for the market in the most attractive form. It is embellished with beautiful engravings, and is the most perfect work of the kind, for the price, that has ever come under our notice.—Farmer, Lancaster, Pa.

PRICE—Bound in cloth, 75 cents; in paper covers, 50 cents, postpaid.

THOMAS C. NEWMAN,

925 W. Madison St., Chicago, Ill.

A Liberal Discount to Dealers by the Dozen or Hundred.